

Measuring Labor and Compensation in the National Accounts

Brent R. Moulton

BEA Advisory Committee Meeting

November 3, 2006

Measuring the Nation's Economy.

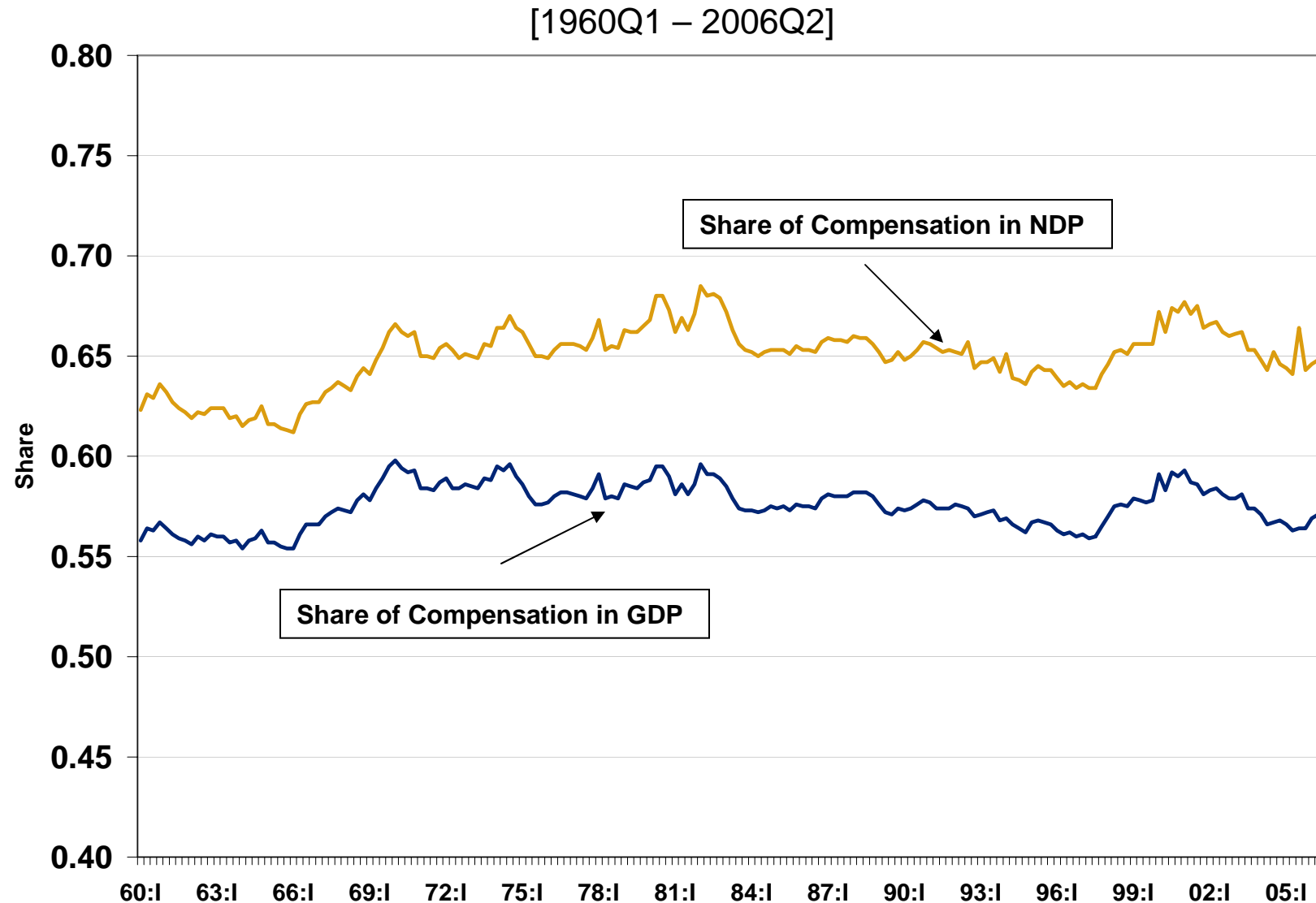


Overview

- Trends in share of compensation in GDP.
- Comparison of BLS and BEA measures of average hourly earnings / compensation.
- Problems in measuring wages & salaries.
- Problems in measuring non-wage compensation.
- Comparison of BLS and BEA measures of employment and hours worked.

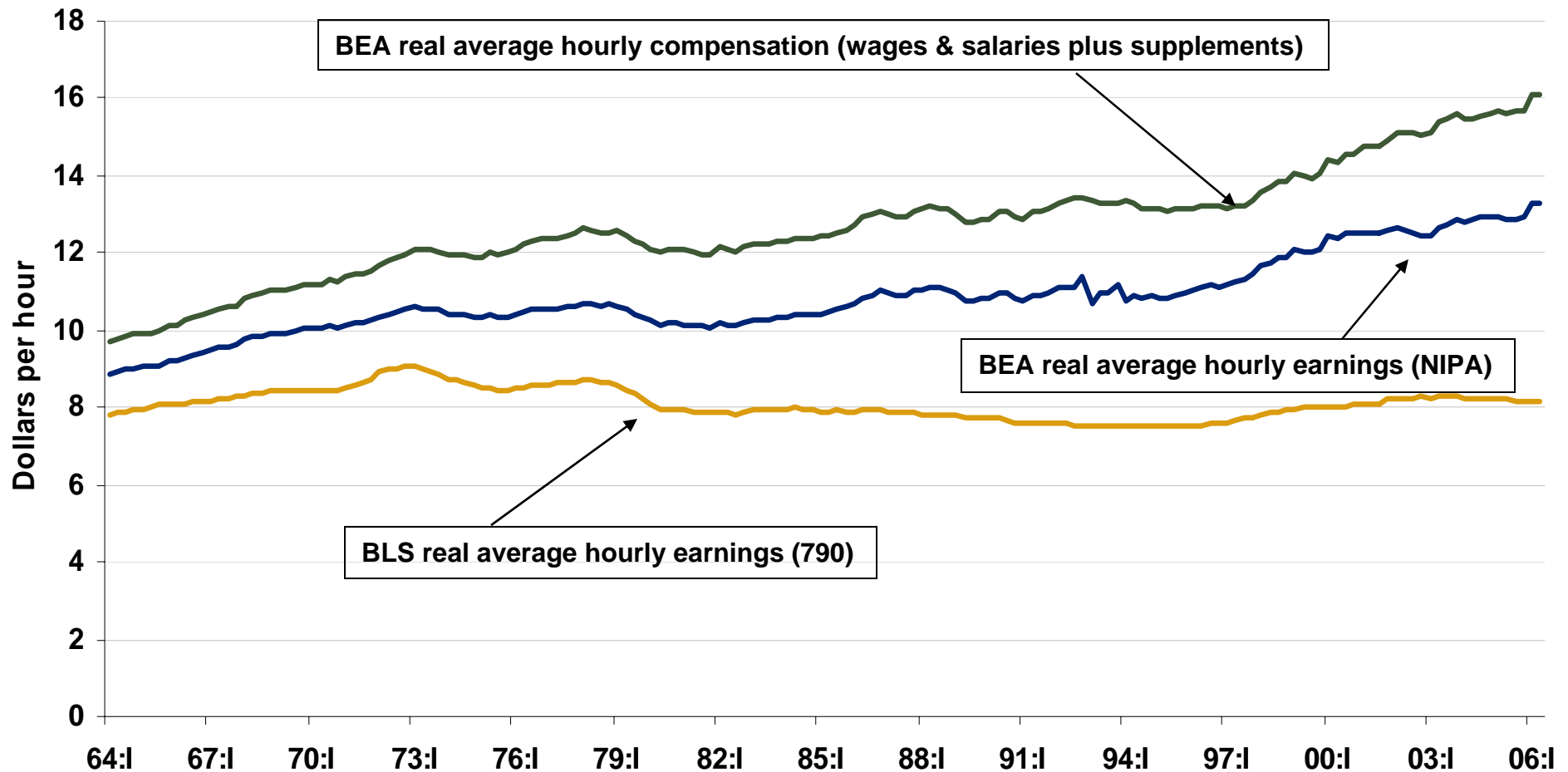


Share of compensation in GDP and NDP



Comparison of Real Average Hourly Earnings NIPA vs. BLS

[1964Q1 – 2006Q2]



Wages & salaries: Concepts and methods

- Wages and salaries consist of the monetary and in-kind remuneration of employees
- Include:
 - compensation of corporate officers;
 - commissions, tips, and bonuses;
 - gains from exercising nonqualified stock options.
- Main source data — BLS quarterly census of employment and wages (administrative unemployment insurance data).
- Adjustments for misreporting, coverage.
- Early estimates extrapolated using monthly BLS current employment statistics:
 - $\text{Avg hourly earnings} \times \text{Avg weekly hours} \times \text{Employment}$



Employee stock options

- For wages & salaries:
 - Reflected in QCEW data when exercised.
 - Not included in current employment statistics used for extrapolation.
 - Not separately identified.
- For profits:
 - Reflected in the corporate income tax data as an expense when exercised.
 - Corporate financial reports (used for extrapolation) now expense *when granted* based on fair value (option pricing model).
- May contribute to volatility and revisions in both wages & salaries and profits.
 - <http://www.bea.gov/bea/about/0503meeting/Wilcox.pdf>

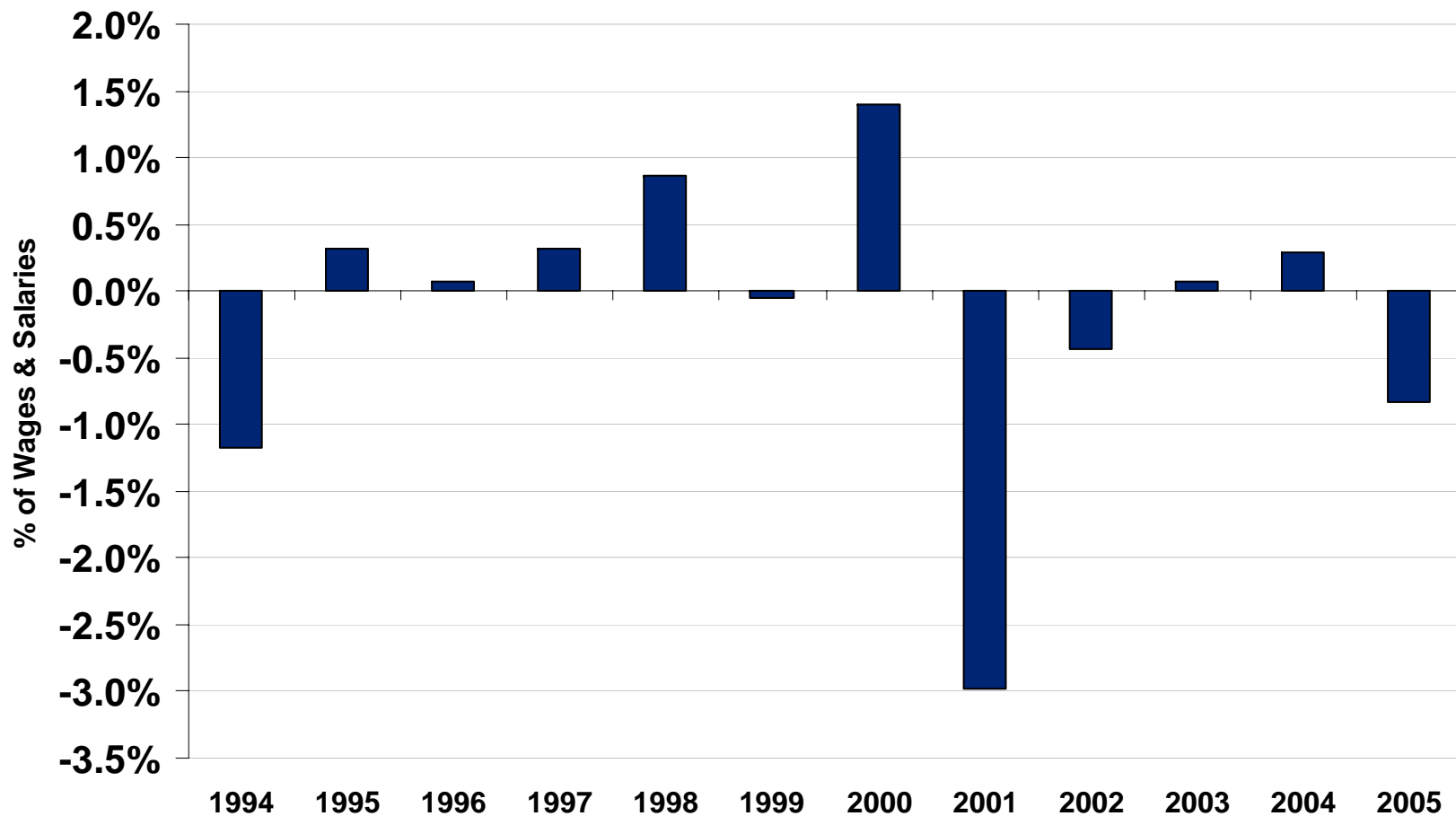


Revisions to wages & salaries

- Prior to 2002, BEA incorporated UI wage data for prior year during our annual (July) revisions.
- Revisions were often quite large.
- Starting in September 2002, UI data have been incorporated with a one-quarter lag.
- Some quarterly revisions have been large, but annual (July) revisions have been reduced.



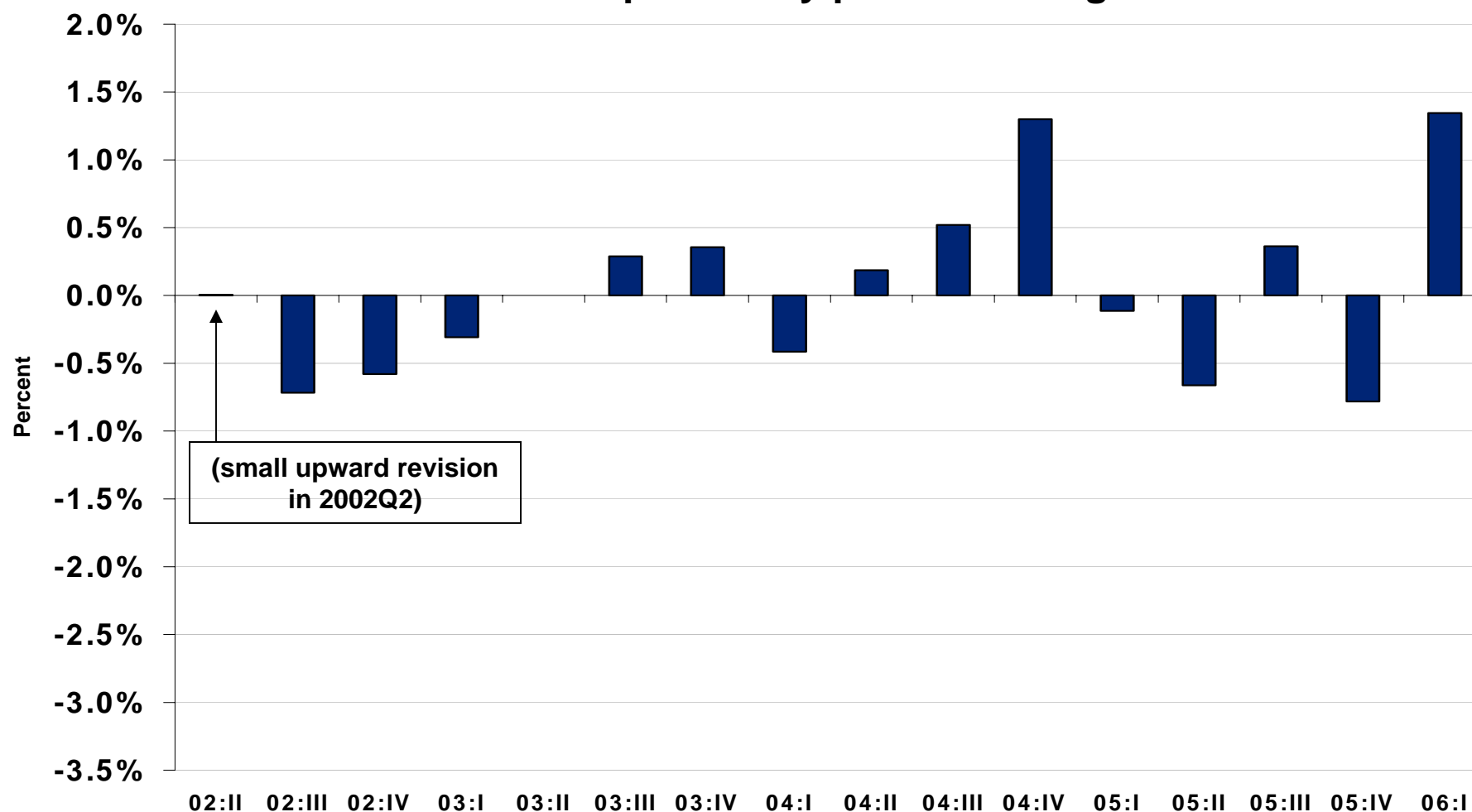
Revisions at first annual revision (as a percent of wage & salary disbursements) *



* Note: Chart highlights data years. The first annual revision is the following year—for example, the large downward revision for 2001 was incorporated in July 2002.

Revisions for first incorporation of QCEW

Percent of previously published wages



* Note: No estimate for 03:II; not possible to separately identify impact of QCEW during 2003 Comprehensive Revision.

Supplements to wages & salaries

- Consist of:
 - Employer contributions for employee pension and insurance funds;
 - Employer contributions for government social insurance (social security).
- Source data for pensions available with long lag:
 - <http://www.bea.gov/bea/about/background/1104/pensions.pdf>
- Pensions extapolated using:
 - data from corporate financial statement footnotes (defined benefit plans),
 - ECI data (defined contribution plans).
- Source data for health insurance (medical expenditures panel survey) available with about a two-year lag.

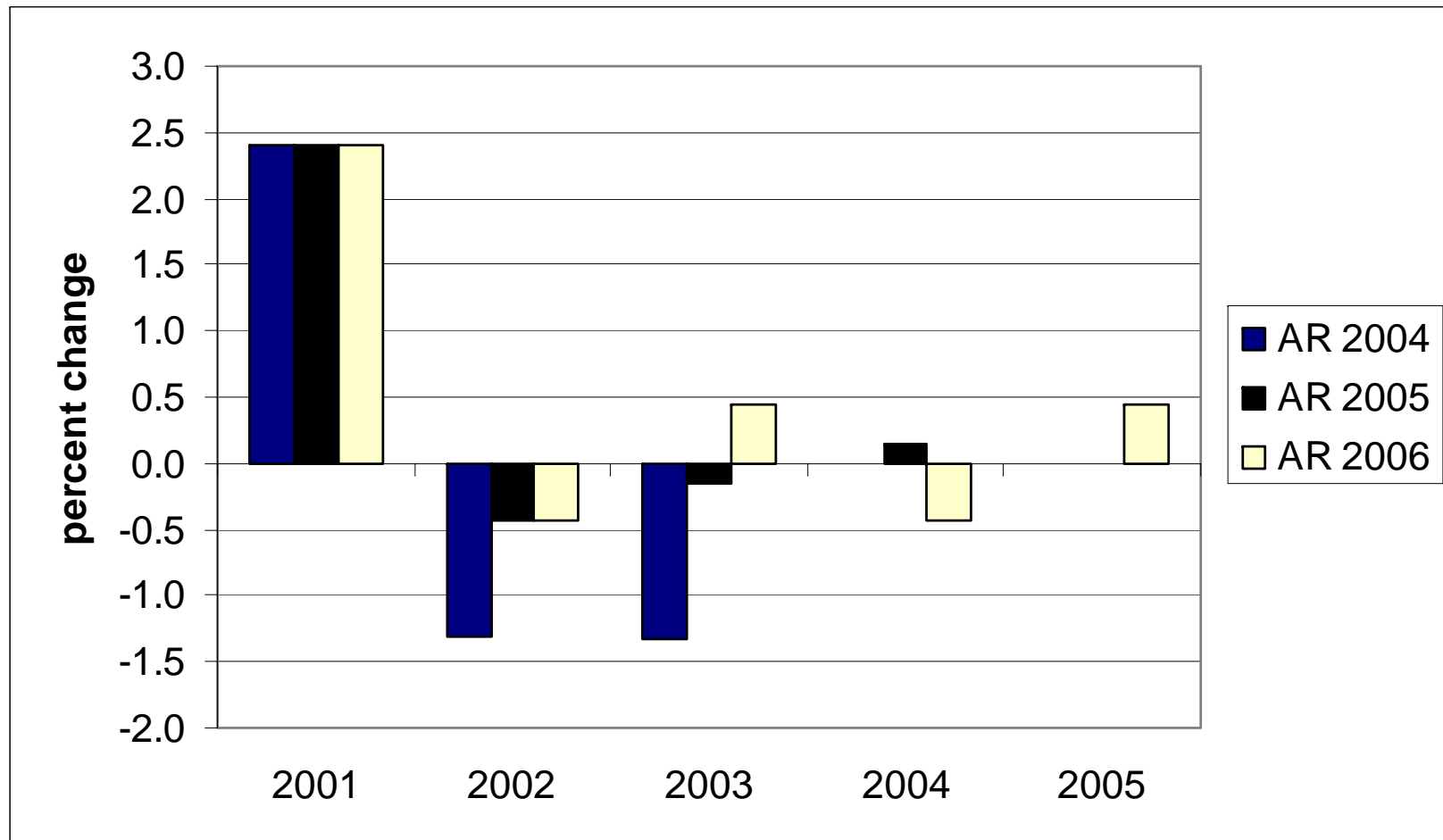


Pensions

- Longer term issue is moving from contributions (treating assets of defined-benefit pensions as if owned by employees) to accrual (showing compensation as accrued liability, regardless of amount contributed).
- Revised *System of National Accounts* is likely to support accrual approach, but allow flexibility in implementation.



Improved Pension Estimates' Impact on Unit Labor Costs



Employment and hours

- BLS is the primary source of official labor data for the United States.
- BEA also prepares a limited number of measures that are consistent with NIPA wage & salary estimates.
- BLS hours data come from employer (790) and household (CPS) surveys.
- BLS hours estimates include self-employed, adjustments for nonproduction and supervisory workers. BEA hours estimates are for employees only and do not include these adjustments.
- BEA estimates include misreporting adjustments.



Research/improvements underway

- BLS is developing an all-employee all-earnings measure for the 790.
- BEA research to reduce revisions due to stock options and bonuses:
 - Correlation with stock prices.
 - Correlation with tax collections.
- Currently we have a pension research effort underway with cooperation of FRB's Flow of Funds Section.
- BEA and BLS working on harmonization of hours measures.
 - Misreporting adjustments.
 - Reconciliation of sources for average weekly hours.

